

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Currently amended) Nanoscale or mesoscopic particles comprised of an inorganic material, wherein the surface thereof is divided into two zones Z1 and Z2, the zone Z1 carries groups F1 and the zone Z2 carries groups F2 different from the groups F1, the zone Z1 being free of groups F2 and the zone Z2 being free of groups F1, ~~the zone Z1 and the zone Z2 being regionally distinct from each other~~

wherein the surface area of each zone represents at least 5% of the total surface area of a particle.

2. (Canceled)

3. (Previously Presented) The particles as claimed in claim 1, wherein the area of each zone represents at least 10% of the total area of a particle.

4. (Previously Presented) The particles as claimed in claim 1, wherein the inorganic material is a mineral oxide or a metal.

5. (Previously Presented) The particles as claimed in claim 4, wherein the inorganic material is a mineral oxide selected from the group consisting of silica, iron oxides, aluminosilicates, titanium dioxide and alumina.

6. (Previously Presented) The particles as claimed in claim 4, wherein the metal is chosen from metals that are stable in an aqueous medium.

7. (Previously Presented) The particles as claimed in claim 1, wherein the inorganic material is silica.
8. (Withdrawn) A method for preparing the particles as claimed in claim 1, the method comprising the following steps:
- 1) masking a zone Z2 of the surface of the initial particles by fixing a polymer nodule thereto;
  - 2) treating the masked particles obtained at the end of step 1) in order to modify the nonmasked surface zone Z1 of said particles;
  - 3) removing the polymer nodule after modifying the zone Z1;
  - 4) optionally, modifying the surface of the zone Z2 of the particles following the demasking process.
9. (Withdrawn) The method as claimed in claim 8, wherein the initial particles used in step 1) have the shape of a sphere, an ellipse, a disk, a block or a rod.
10. (Withdrawn) The method as claimed in claim 8, wherein the polymer used for masking the zone Z2 of the surface of the initial particles comprises recurrent units  $-\text{CH}_2\text{-CRR}'-$ , which may be identical or different, in which:
- R represents H or an alkyl group,
  - R' represents H, an alkyl group, an aryl group, an alkylaryl group, an alkenylaryl group, a pyridyl group, a nitrile group, a group  $-\text{COOR}''$  or a group  $-\text{OC}(\text{O})\text{R}''$  in which R'' is H, an alkyl or an alkenyl.
11. (Withdrawn) The method as claimed in claim 10, wherein R, R' and/or R'' represent, independently of one another, an alkyl group or an aryl group which carries a functional group.
12. (Withdrawn) The method as claimed in claim 10, wherein said polymer is crosslinked or noncrosslinked.

13. (Withdrawn) The method as claimed in claim 10, wherein said polymer is a polystyrene or a copolymer of styrene and of divinylbenzene which is particularly preferred as material for the polymer nodule.

14. (Withdrawn) The method as claimed in claim 8, wherein step 1) comprises the following steps:

1a) modifying the surface of the initial particles using a coupling agent C which comprises a function  $F_C$  which has an affinity for one or more precursors of the polymer B;

1b) bringing the modified initial particles obtained at the end of step 1a) into contact with the precursor(s) of the polymer B, in the presence of a free-radical initiator and of a surfactant in solution in a solvent, in proportions that allow the formation of one polymer nodule per initial particle.

15. (Withdrawn) The method as claimed in claim 14, wherein the coupling agent, hereinafter referred to as macromonomer, is a macromolecule having a hydrophilic chain that ends with a polymerizable function  $F_C$ .

16. (Withdrawn) The method as claimed in claim 15, wherein the macromonomer is chosen from poly(ethylene oxide)s, hydroxycelluloses, poly(vinylpyrrolidone)s, poly(acrylic acid)s and poly(polyvinyl alcohol)s, said compounds carrying said function  $F_C$ .

17. (Withdrawn) The method as claimed in claim 14, wherein step 1a) is implemented by covalent grafting of a coupling agent carrying a function  $F_C$  which is copolymerizable with the precursor(s) of the polymer.

18. (Withdrawn) The method as claimed in claim 17, wherein the material constituting the initial particles is a mineral oxide, and the coupling agent fixed by covalent grafting is chosen from organometallic derivatives such as organosilanes corresponding to the formula  $R^1_nSiX_{4-n}$  ( $n=1$  to  $3$ ), in which X is a hydrolyzable group and  $R^1$  is a radical comprising said functional group  $F_C$ .

19. (Withdrawn) The method as claimed in claim 14, wherein the initial particles are suspended at a pH close to neutrality such that they are surface-charged, in the presence of an

amphiphilic compound comprised of a hydrophobic part that has a polymerizable group and of a polar head that carries a charge opposite to that of the surface.

20. (Withdrawn) The method as claimed in claim 19, wherein the amphiphilic compound is chosen from compounds derived from styrene sulfonates (having a negatively charged hydrophilic polar head) and quaternary alkylammoniums (having a positively charged polar head), the two types of compounds carrying a hydrophobic group that ends with a polymerizable function.

21. (Withdrawn) The method as claimed in claim 14, wherein step 1b) is carried out by bringing the modified particles obtained at the end of step 1a) into contact with one or more monomers that are precursors of the polymer, in the presence of a polymerization initiator, said monomer(s) carrying functions  $F_B$  capable of reacting with the functions  $F_C$ .

22. (Withdrawn) The method as claimed in claim 14, in which the coupling agent used in step 1) is a macromonomer fixed to the initial particle by adsorption, wherein, in step 2), the macromonomer is removed from the zone Z1 by desorption, and then the particles are brought into contact with a compound capable of reacting with the hydroxyl functions which are at the surface of the zone Z1.

23. (Withdrawn) The method as claimed in claim 22, wherein said compound is a trialkoxysilane carrying a functional group  $-\text{CH}_2-\text{CH}_2-\text{CH}_2\text{X}$  in which X is an amine, a thiol or a glycidoxy group, said group optionally allowing subsequent couplings with other molecules.

24. (Withdrawn) The method as claimed in claim 14, wherein the coupling agent carrying the function  $F_C$  is grafted via a covalent bond onto the initial inorganic particle, said function  $F_C$  being the function F1 that is to be fixed to the zone Z1.

25. (Withdrawn) The method as claimed in claim 14, wherein the coupling agent carrying the function  $F_C$  is grafted via a covalent bond onto the initial inorganic particle, and in that the functions  $F_C$  are converted to functions F1 by a chemical process.

26. (Withdrawn) The method as claimed in claim 14, wherein step 3) is carried out by centrifugation or by sonication.

27. (New) Nanoscale or mesoscopic particles comprised of an inorganic material,  
wherein the surface of a particle is divided into two zones Z1 and Z2,  
wherein zone Z1 is a continuous zone carrying hydrophilic functional groups F1 and zone  
Z2 is a continuous zone carrying hydrophobic functional groups F2,  
wherein zone Z1 is free of groups F2 and zone Z2 is free of groups F1, and  
wherein the surface area of each zone represents at least 5% of the total surface area of a  
particle.